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UNITED STATES PATENT AND TRADEMARK OFFICE

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BEFORE THE BOARD OF PATENT APPEALS  
AND INTERFERENCES

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*Ex parte* RAJ DOSANJH

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Appeal 2009-007286  
Application 10/630,432  
Technology Center 3600

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*Before:* MURRIEL E. CRAWFORD, HUBERT C. LORIN, and BIBHU R.  
MOHANTY, *Administrative Patent Judges.*

CRAWFORD, *Administrative Patent Judge.*

DECISION ON APPEAL<sup>1</sup>

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<sup>1</sup> The two-month time period for filing an appeal or commencing a civil action, as recited in 37 C.F.R. § 1.304, or for filing a request for rehearing, as recited in 37 C.F.R. § 41.52, begins to run from the “MAIL DATE” (paper delivery mode) or the “NOTIFICATION DATE” (electronic delivery mode) shown on the PTOL-90A cover letter attached to this decision.

### STATEMENT OF THE CASE

This is an appeal from the final rejection of claims 1-2, 4-13, 15-21, and 23-24. We have jurisdiction to review the case under 35 U.S.C. §§ 134 and 6 (2002).

The claimed invention is directed to systems and methods for pricing of goods and services in the field of computing and information technology. (Spec. 1:3-5.). Claim 1, reproduced below, is further illustrative of the claimed subject matter.

1. A method of determining a price at which a supplier provides a commodity to a customer, the method being performed by the supplier and comprising:

(a) characterizing, by the supplier, nature of growth of the customer's usage of the commodity;

(b) receiving information from the customer specifying the commodity required;

(c) receiving notification of the use of a quantity of the commodity by the customer; and

(d) determining, by the supplier, a price for the commodity used, the determined price being dependent on the quantity of the commodity used by the customer, a level of commercial risk associated with the nature of growth of the customer's usage of the commodity, and an industry average price for the commodity at the time of determination of the price, wherein, if usage monitoring indicates that the customer has a need for more or less of the commodity, the method further comprises effecting provision of more or less of the commodity from the supplier to the customer.

Claims 1, 2, and 4-11 stand rejected under 35 U.S.C. § 101 for failing to recite patentable subject matter; claims 1-2, 4-7, 11-13, 15-18, and 23-24 stand rejected under 35 U.S.C. § 103(a) as unpatentable over Takriti (US Pat. 6,021,402, iss. Feb. 1, 2000) in view of Pitchford (US Pat. 6,327,541

B1, iss. Dec. 4, 2001) and Rose (US Pat. 5,963,920, iss. Oct. 5, 1999); and claims 8-10 and 19-21 stand rejected under 35 U.S.C. § 103(a) as unpatentable over Takriti in view of Pitchford, Rose, and Official Notice, which is supported by documentary evidence provided in the Office action mailed May 30, 2007.

We AFFIRM.

### ISSUES

Did the Examiner err in asserting that a combination of Takriti, Pitchford, and Rose renders obvious the subject matter of claims 1-2, 4-7, 11-13, 15-18, and 23-24?

Did the Examiner err in asserting that a combination of Takriti, Pitchford, Rose, and Official Notice renders obvious the subject matter of claims 8-10 and 19-21?

Did the Examiner err in asserting that claims 1, 2, and 4-11 do not recite statutory subject matter under 35 U.S.C. § 101?

### FINDINGS OF FACT

#### *Takriti*

Takriti discloses a process that implements on a computer system for scheduling electric-power generators of a utility company. Given (1) a set of load forecasts on the electric system, (2) a prediction of trading transactions that may take place within the next 168 hours, (3) a description of the physical properties of the generating units and the expected spot market prices for electric power, and (4) fuel prices associated with load forecasts, our process provides for each scenario (1) generation levels, (2) fuel usage,

and (3) prices at which power can be traded. This information is then used by decision makers and plant managers to run the electric system reliably. Our tool provides multiple decisions, e.g., generation, fuel consumption, and power prices, for each hour of the planning horizon. Each of these decisions is optimal under certain circumstances. The system administrator observes the market, then looks up the appropriate decision from a table provided by our tool (col. 7, ll. 19-35).

Given load patterns observed in previous years and given load values for the past week, utilities use the weather forecast (temperature, humidity, sky conditions, and wind) to predict the load for the next week or 168 hours. All utilities have advanced tools and employ experienced planners to perform the forecasting task. Due to uncertainty in load, the user is allowed to provide a set of forecasts to better approximate the load distribution (col. 7, ll. 59-67).

Given access to the previous data, our tool produces a table (spreadsheet) that indicates the load (MWH) on each unit at each hour of the week. This table is passed on to the administrators of each generator to be used as an operating schedule for the coming week. It also provides prices at which power is expected to be traded. As a result of the calculations, each plant manager is given precisely what type of fuel to use and how much to burn at each hour of the week. The tool can be used to perform a “what-if” analysis which helps the user in developing a better understanding of the relationship between the power market and his/her electric system; and in better quantifying the risk involved in buying and selling power in the periods to come (col. 8, ll. 42-54).

The existing tools for scheduling electric-power systems use a single load forecast when searching for optimal decisions. Furthermore, they do not consider power trading in the model. In other words, existing tools assume that future loads are known in advance which results in conservative schedules. Takriti discloses that what distinguishes their tool is that it allows the user to incorporate risk, through predictions of the load and fuel prices, and uses these predictions to create optimal schedules. The Takriti tool uses hedging strategies to produce robust schedules that minimize cost and manage risk efficiently (col. 8, ll. 55-65).

#### ANALYSIS

*Claims 1-2, 4-7, 11-13, 15-18, and 23-24*

We are not persuaded that the Examiner erred in asserting that a combination of Takriti, Pitchford, and Rose renders obvious the subject matter of claims 1-2, 4-7, 11-13, 15-18, and 23-24 (App. Br. 6-22; Reply Br. 3-4). Appellant asserts that in Takriti

a characterization of a customer's usage of power supplied by the supplier is not made; a determination of a price for a quantity of power requested by a customer is not made; and a level of commercial risk is not determined for a customer which is a basis for determining the price for a quantity of power specified by the customer.

(App. Br. 8, 10). However, column 7, lines 59-67 of Takriti is cited as disclosing the characterization of a customer's usage of power, column 7, lines 25-32 and column 8, lines 46-65 of Takriti disclose prices (both fuel and traded power), and column 8, lines 46-65 of Takriti is cited for disclosing commercial risk as it relates to prices (Exam'r's Ans. 5).

Appellant also asserts that “Rose does not disclose that a customer’s usage of commodities are used by a supplier to determine the pricing of a commodity provided by the supplier to the customer of the supplier” (App. Br. 9, 10-11; Reply Br. 3-4). However, Pitchford is cited for disclosing these aspects (Exam’r’s Ans. 5-6). *See In re Keller*, 642 F.2d 413, 426 (CCPA 1981) (one cannot show non-obviousness by attacking references individually where the rejections are based on combinations of references).

Appellant further asserts that “*Pitchford* fails to disclose a determination of a price for a quantity of power requested by a customer being made and a level of commercial risk being determined for a customer which is a basis for determining the price for a quantity of power specified by the customer” (Reply Br. 3). However, Takriti is cited as disclosing these aspects as set forth above (Exam’r’s Ans. 5). *See Keller*, 642 F.2d at 426.

*Claims 8-10 and 19-21*

We are not persuaded that the Examiner erred in asserting that a combination of Takriti, Pitchford, Rose, and Official Notice renders obvious the subject matter of claims 8-10 and 19-21 (App. Br. 22-25). The Examiner provided HotOS-VII, *Seventh Workshop on Hot Topics in Operating Systems* (Mar. 1999) (hereinafter “HotOS-VII”) as documentary support for the Official Notice, as requested by Appellant, in the Office Action mailed May 30, 2007 (Exam’r’s Ans. 13-14, 17). In the absence of Appellant’s specific, technical arguments as to why HotOS-VII does not provide proper documentary support for the Official Notice, we sustain these rejections.

*101 Rejection*

We are not persuaded that the Examiner erred in asserting that claims 1, 2, and 4-11 do not recite statutory subject matter under 35 U.S.C. § 101 (Reply Br. 2-3). Appellant asserts that “the claim language includes a transformation of an electronic signal representative of a physical subject which is interpreted to be statutory subject matter by the Federal Circuit” (Reply Br. 2). Appellant misunderstands the teachings of *Diamond v. Diehr*, 450 U.S. 175 (1981) and *Gottschalk v. Benson*, 409 U.S. 63 (1972). *Diamond* stands for the proposition that the transformation of an electronic signal representative of a physical subject that corresponds to a physical change in the physical subject is patentable subject matter. Here, the change in a price of the commodity does not effect a physical change in the commodity itself.

By contrast, *Gottschalk* prevents the patenting of a computer based algorithm that merely transforms data from one form to another, as such a “patent would wholly pre-empt the mathematical formula and in practical effect would be a patent on the algorithm itself.” See *Gottschalk v. Benson*, 409 U.S. at 72. Such is the case here, where the price determination recited in independent claim 1 is merely transforming price data from one form to another.

DECISION

The rejection of claims 1-2, 4-13, 15-21, and 23-24 under 35 U.S.C. § 103(a) is AFFIRMED.

The rejection of claims 1, 2, and 4-11 under 35 U.S.C. § 101 is AFFIRMED.



Appeal 2009-007286  
Application 10/630,432

No time period for taking any subsequent action in connection with this appeal may be extended under 37 C.F.R. § 1.136(a)(1)(iv) (2007).

AFFIRMED

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